Panel Scientific and Technical Review Form

(Note: Review comments will be anonymous, but public.)

Proposal number: 2001-I203 Short Proposal Title: Partnerships for

Environmental Education

1a) Are the objectives and hypotheses clearly stated?

Summary of Reviewers comments:

Yes: expand environmental education opportunities in San Joaquin Valley, assist teachers in understanding and teaching watershed stewardship, and promote an awareness of ecological principles and environmental stewardship.

Develop a regional curriculum based on existing curricula.

Panel Summary:

Applicant would like to expand environmental education programming at two sites and establish programming at a new site.

The expected outcome will be greater awareness and understanding, improved stewardship, and improved teacher capacity.

1b1) Does the conceptual model clearly explain the underlying basis for the proposed work?

Summary of Reviewers comments:

"Does not address how the new curriculum and field trip experiences are tied to current education reform and useful to both students and teachers."

"An environmental education program that is linked to the standard school curriculum, provides opportunities for meaningful field trips, and includes supporting teacher education will be used by local teachers and school districts."

Panel Summary:

We did not find clear explanation of content of, rationale for, or delivery of curriculum. Though the names of environmental education centers were given and curriculums such as Salmonids in the classroom were named, titles provide little understanding of the educational substance of these curriculums.

1b2) Is the approach well designed and appropriate for meeting the objectives of the project?

Summary of Reviewers comments:

Funds to expand existing programs, including increased staffing and development of sites. 3 locations.

Panel Summary:

See Panel comments above. Applicant lists some activities (day hikes, canoe trips, service projects, teacher trainings) but does not explain what these activities will do for participants or how.

Applicant wants to develop a regional curriculum, but gives little indication of how that will be done or by whom.

1c1) Has the applicant justified the selection of research, pilot or demonstration project, or a full-scale implementation project?

Summary of Reviewers comments:

One panelist indicates that there is a demonstrated demand for the increased services. The other reviewer questions whether expansion is justified because curriculum has not been evaluated for efficacy.

Panel Summary:

Without a better understanding of the content and delivery of curriculum the panel has no sense of whether programs should be expanded.

1c2) Is the project likely to generate information that can be used to inform future decision making?

Summary of Reviewers comments:

New regional curriculum would be new information.

Panel Summary:

N/A

2a) Are the monitoring and information assessment plans adequate to assess the outcome of the project?

Summary of Reviewers comments:

"Monitoring and evaluation of field trip implementation and curriculum development will occur. The results will correspond with be used to adjust curriculum content, scheduling, staffing, content location, and other elements of field trip implementation."

Panel Summary:

Applicant plans to use "standard education evaluation techniques" including questionnaires, oral interviews and surveys. They will also evaluate logistics, costs, attendance rates.

2b) Are data collection, data management, data analysis, and reporting plans well-described, scientifically sound and adequate to meet the proposed objectives?

Summary of Reviewers comments:

Annual reporting on participation.

Panel Summary:

By Dept. of Fish and Game

3) Is the proposed work likely to be technically feasible?

Summary of Reviewers comments:

Yes, proposed work builds on curricula and sites which already exist.

Yes, but does it address what is being done at the schools - is there an educational need to be met?

Panel Summary:

The panel believes that the applicants can increase current programs (field trips, etc). However, a well thought out plan to develop and deliver the regional curriculum is lacking.

4) Is the proposed project team qualified to efficiently and effectively implement the proposed project?

Summary of Reviewers comments:

Proponents are well qualified, with extensive experience in education and natural resource management.

But since the linkage to schools is not well described we do not know what teachers are involved and whether they are qualified.

Panel Summary:

The team has good qualifications. We would like to understand the linkage to schools better as well.

5) Other comments

Overall Evaluation PANEL SUMMARY COMMENTS

Summary Rating -This proposal needed to do a better job of describing what the applicants wanted to teach students (content) and how concepts and information would be delivered. We would also have liked to see the rationale (the why) for the proposed educational activities? How (specifically) will these activities impact students?

- -Applicant needs to demonstrate ties to and support of the schools. Maybe some letters of support from the Districts served?
- -What are the gaps in current curriculum? How do these justify development of a regional curriculum? Who will develop this curriculum and what procedure will they use?
- -One measurable we would like to see is the number of field trips expected.

Excellent

Very Good

Good

XXX Fair

Poor

Your Rating: FAIR